

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 are cancelled.

11. (New) A method for measurement of thermal conductivity of a honeycomb structure, the method comprising the steps of:

keeping the whole honeycomb structure in a steady temperature state with keeping two ends of the honeycomb structure at given different temperatures; and
measuring a thermal conductivity of the honeycomb structure in the steady state.

12. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 11, wherein contact members kept at given different temperatures are contacted with the two ends of the honeycomb structure to keep the two ends of the honeycomb structure at given different temperatures.

13. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 12, wherein the thermal conductivity λ (W/mK) of the honeycomb structure is calculated from the following expression (1):

$$\lambda = QH \cdot [L / (T1 - T2)] \quad (1)$$

where the thermal conductivity λ (W/mK) of the honeycomb structure is specified in relation to:

an amount of heat flow QH (W/m²) = [(Q1 + Q2)/2], each of Q1 (W/m²) and Q2 (W/m²) being obtained by measuring an amount of heat flow at each contact member using a heat flow meter connected with the contact member;

a distance L (m) between the two ends of the honeycomb structure; and

temperatures T1 (K) and T2 (K) of the two ends of the honeycomb structure in the steady temperature state of the whole honeycomb structure.

14. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 12, wherein the two ends of the honeycomb structure and the contact members are contacted with each other via high-thermal-conductivity members.

15. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 13, wherein the two ends of the honeycomb structure and the contact members are contacted with each other via high-thermal-conductivity members.

16. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 14, wherein a sheet having flexibility is used as the high-thermal-conductivity member.

17. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 15, wherein a sheet having flexibility is used as the high-thermal-conductivity member.

18. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 14, wherein the high-thermal-conductivity member is made of a film formed by applying a paste containing a substance of high thermal conductivity, on a contact face of the honeycomb structure and/or the contact member.

19. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 15, wherein the high-thermal-conductivity member is made of a film formed by applying a paste containing a substance of high thermal conductivity, on a contact face of the honeycomb structure and/or the contact member.
20. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 16, wherein the high-thermal-conductivity member is made of a film formed by applying a paste containing a substance of high thermal conductivity, on a contact face of the honeycomb structure and/or the contact member.
21. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 17, wherein the high-thermal-conductivity member is made of a film formed by applying a paste containing a substance of high thermal conductivity, on a contact face of the honeycomb structure and/or the contact member.
22. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 12, wherein a contact pressure between the contact member and the end of the honeycomb structure is set at 1 to 10 kg/cm².
23. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 11, wherein an exposed portion of the side of the honeycomb structure is covered with a heat-insulating material.

24. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 11, wherein the honeycomb structure is made of a material having a thermal conductivity of 1 (W/mK) or more.

25. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 11, wherein the honeycomb structure contains at least one kind selected from the group consisting of silicon carbide, a composite of silicon carbide and metallic silicon, and silicon nitride.